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Three new species of Eriophyid mites (*Acariformes: Eriophyidae*,
Rhyncaphytoptidae) from Poland

[Pp. 31—38, 14 text-figs]

Trzy nowe gatunki szpecieli (*Acariformes: Eriophyidae, Rhyncaphytoptidae*) z Polski

Три новых вида *Eriophyidae* (*Acariformes: Eriophyidae, Rhyncaphytoptidae*) из Польши

Abstract: Description of three new species of mites from the families *Eriophyidae* and *Rhyncaphytoptidae* is given. These are: *Acaricalus juniperi* sp. n., *Aculus granulatus* sp. n. and *Diptacus sulcatus* sp. n.

Amongst material of Eriophyid mites which I had collected since 1961 in the Łódź uplands I found three new species: *Acaricalus juniperi* sp. n. and *Aculus granulatus* sp. n. of the family *Eriophyidae*, as well as *Diptacus sulcatus* sp. n. of the family *Rhyncaphytoptidae*.

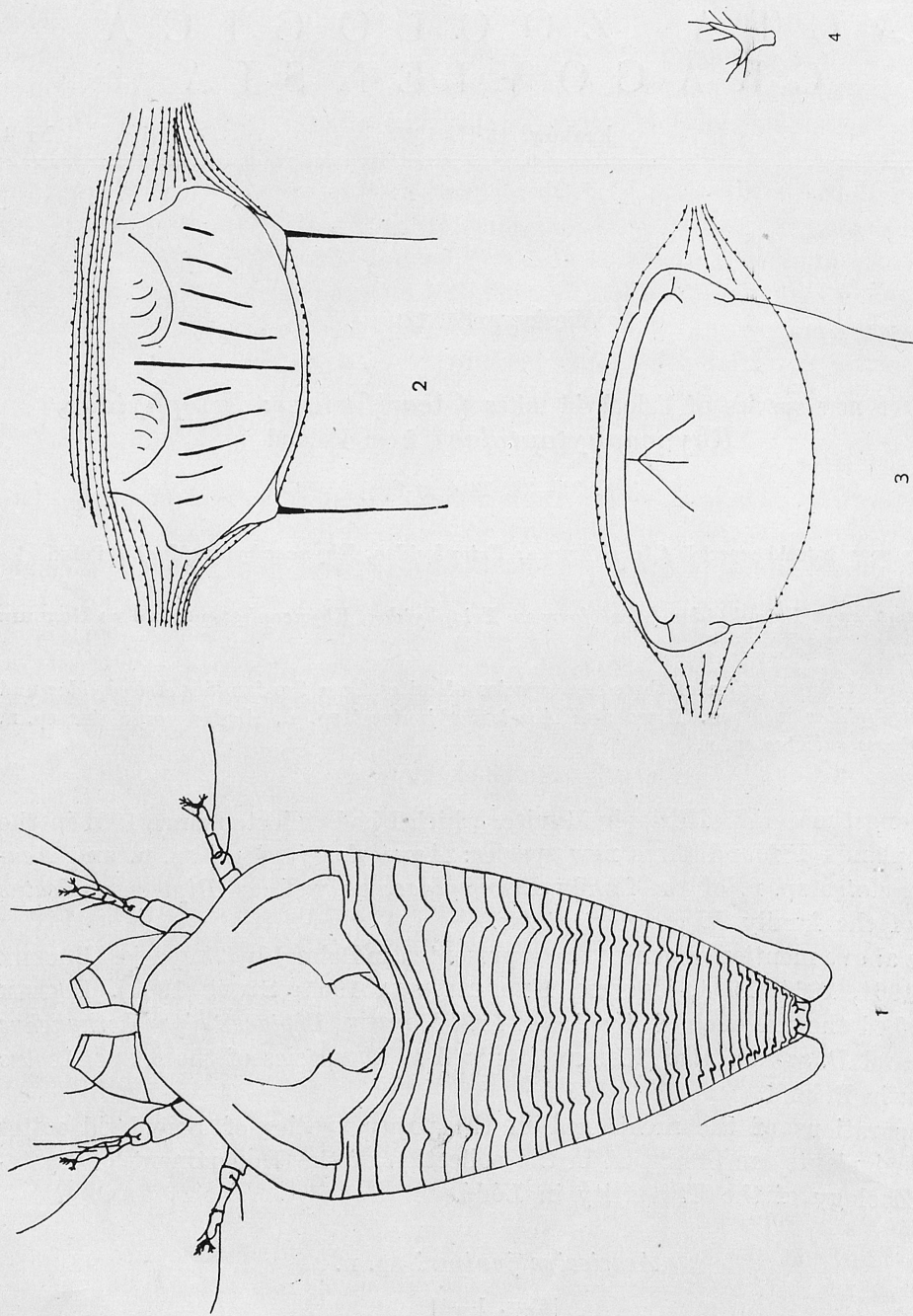
The above mentioned genera are represented in Poland by 23 species (BOCZEK 1961, 1961, 1964, 1964, BOCZEK, KROPczyńska 1965; SZULC 1963). BOCZEK established the presence of *Acaricalus halli* BOCZEK, *Diptacus giganthorhynchus* (NAL.) and *D. sacramentae* (KEIFER), as well as 20 species of the genus *Aculus* KEIFER in Poland.

Preparations of the mentioned in the paper species of Eriophyid mites and dried plants are preserved in the collection of the Department of Systematic Zoology of the University in Łódź.

Acaricalus juniperi sp. n.

[Figs. 1—4]

Description: female 155 μ long, 70 μ wide, wedgeshaped. Rostrum 26 μ long. Shield, with a long projection over rostrum, 54 μ long; 65 μ wide. On



Figs. 1—4. *Acariculus juniperi* sp. n. 1 — dorsum of male, 2 — epigynum of female, 3 — epigynum of male, 4 — featherclaw.

either side of the shield appears an archlike line. Dorsal tubercles apart from the rear shield margin; dorsal setae $7\ \mu$ long; dorsal tubercles $19\ \mu$ apart. Forelegs $32\ \mu$ long; tibia $6\ \mu$ long, with seta $7\ \mu$ long; knobbed claw $7\ \mu$ long, featherclaw partly forked. Hindlegs $30\ \mu$ long; tibia $4\ \mu$ long, tarsus $6\ \mu$ long; knobbed claw $6\ \mu$ long; rear coxae setae $49\ \mu$. Opistosoma with 36 smooth tergites and about 60 microtuberculate sternites. The tergites form three ridges, of which the middle one ends before the side ridges. Lateral setae on 11-th sternite $18\ \mu$ long; first ventral setae on 33-rd sternite $24\ \mu$ long; second ventral setae on 49-th sternite $39\ \mu$ long; third ventral setae on 6-th sternite from the rear $20\ \mu$ long; accessory setae $5\ \mu$ long. Genital coverflap $10\ \mu$ long; $23\ \mu$ wide; epigynium with about 11 furrows; genital setae $11\ \mu$ long.

Male: $145\ \mu$ long; $76\ \mu$ wide; rostrum $31\ \mu$ long; shield $54\ \mu$ long with broad projection over rostrum: shield $73\ \mu$ wide. Forelegs $29\ \mu$ long; hindlegs $25\ \mu$ long. Genital coverflap $23\ \mu$ long; genital setae $10\ \mu$ long.

Host plant: *Juniperus communis* L.

Relation to host: The mites *A. juniperi* sp. n. live freely at the base of juniper fruit.

Collected: Lućmierz, 8 VII 1961, forest — one male, and Tuszyn — Las, 5 VIII 1965 — two females. Material collected by the author.

Material: Holotype, male; allotype, female and one paratype, female.

Discussion: Comparison of species of the genus *Acaricalus* K. shows that proportion of length to width of the body, as well as the shield is smaller in the case of *A. juniperi* sp. n. More so, the new species differs in way of a shorter rostrum, long ventral setae II and III, and not quite divided featherclaw.

Aculus macrotuberculatus sp. n.

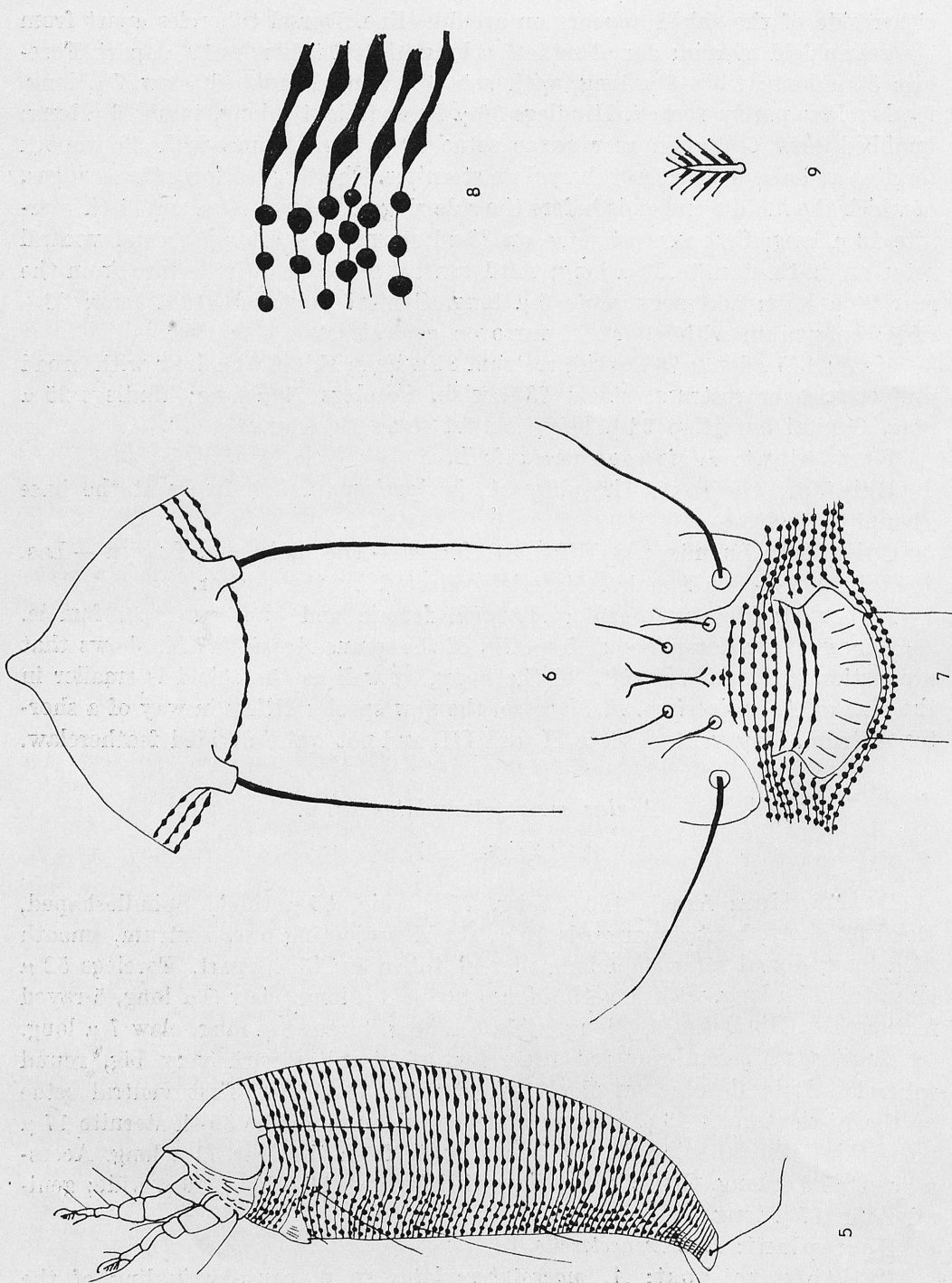
[Figs. 5—9]

Description: female $190\ \mu$ long, $75\ \mu$ wide, $65\ \mu$ thick. Spindleshaped, Rostrum short, bent downwards $19\ \mu$; shield projecting over rostrum, smooth $34\ \mu$ long; dorsal setae $56\ \mu$ long; dorsal tubercles $25\ \mu$ apart. Forelegs $52\ \mu$ long; tibia $7\ \mu$ long, with seta $10\ \mu$ long; tarsus $8\ \mu$ long; claw $5\ \mu$ long, 5-rayed featherclaw. Hindlegs $45\ \mu$ long, tibia $6\ \mu$ long, tarsus $8\ \mu$ long, claw $7\ \mu$ long. 58 tergites with semi-rounded tubercles, 66 sternites with very big, round tubercles. Lateral setae on the 11-th sternite $36\ \mu$ long; first ventral setae on the 24-th sternite $46\ \mu$ long; second ventral setae on the 39-th sternite $17\ \mu$ long; third ventral setae on the 7-th sternite from the rear $32\ \mu$ long. Accessory setae $3\ \mu$ long. Genital coverflap with furrows $11\ \mu$ long, $26\ \mu$ wide; genital setae $17\ \mu$ long.

Host plant: *Rumex acetosella* L.

Relation to host: *A. macrotuberculatus* sp. n. cause wrinkling of the leaves and hair growth on their underside.

Collected: Konstantynów n/Łódź, 15 IX 1963, in ditch by the road. Material collected by author.



Material: Holotype female, and 5 female paratypes.

Discussion: Amongst species of the genus *Aculus* K. with many tuberculate tergites, *A. macrotuberculatus* sp. n. presents most likeness to *Aculus dispar* (NAL.). However, the new species differs in greater body measurements, lack of shield pattern, and longer dorsal setae.

Diptacus sulcatus sp. n.

[Figs. 10—14]

Description: female 250—270 μ long, 100 μ wide, 79 μ thick. Spindle-shaped. Rostrum aimed downwards under right angle, 39 μ ; shield projecting over rostrum 79 μ long; dorsal tubercles 30 μ apart; dorsal setae 19 μ long. Forelegs 58 μ long, tibia 15 μ long, tibial setae 10 μ long, tarsus 11 μ long, claw 6 μ long, featherclaw divided. Hindlegs 54 μ long, tibia 12 μ long, tarsus 11 μ long, claw 7 μ long. 50 tergites, sternites numerous. The last 14 tergites with small tubercles, remaining smooth. Sternites with numerous small tubercles. Lateral setae 21 μ long on 18-th sternite; first thin ventral setae on 43-rd sternite 73 μ long; second ventral setae on 64-th sternite 12 μ long; third ventral setae on 7-th sternite from the rear 39 μ long. No accessory setae. Genital coverflap 19 μ long, 32 μ wide, genital setae 15 μ long. Genital coverflap with numerous furrows.

Host plant: *Carpinus betulus* L.

Relation to host: *D. sulcatus* sp. n. lives freely on the underside of leaves.

Collected: Przyłek Duży n/Łódź, 11 VIII 1962, near the railroad. Material collected by author.

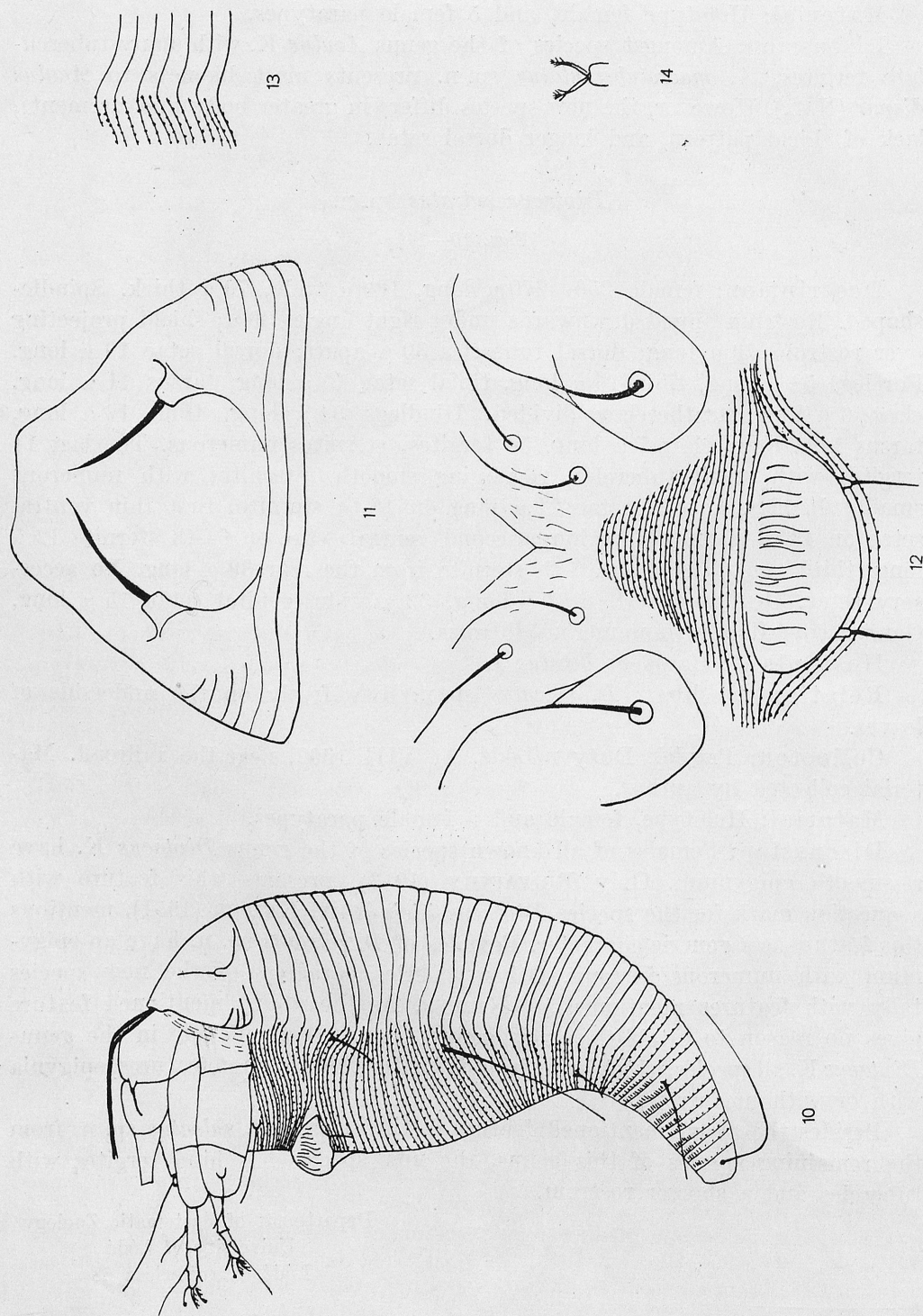
Material: Holotype, female and 6 female paratypes.

Discussion: Females of all known species of the genus *Diptacus* K. have a smooth epigynium. Only ROIVAINEN (1953), presents this feature with a question mark for the species *Diptacus ilicis* ROIV. KEIFER (1951), mentions this feature as a generic character. Females of *D. sulcatus* sp. n. have an epigynium with numerous furrows. Other generic characters of the new species tally with features mentioned by KEIFER. As the above mentioned feature gives no reason to establish a new genus, I propose to include in the genus *Diptacus* K. all species, which have, in addition to other common features, epigynia with or without furrows.

Besides the above-mentioned feature distinguishing *D. sulcatus* sp. n. from the remaining species of this genus, the new species has hind tergites with tubercles and a shorter rostrum.

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Figs. 5 — 9. *Aculus macrotuberculatus* sp. n. 5 — lateral surface of female, 6 — shield, 7 — epigynium and coxae of female, 8 — fragment of sternites seen sidewise, 9 — featherclaw.



Figs. 10—14. *Dipitacus sulcatus* sp. n. 10 — lateral surface of female, 11 — shield, 12 — epigynum and coxae of female, 13 — fragment of sternites seen from the side 14 — featherclaw

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STRESZCZENIE

Wśród materiałów szpecieli, które zbieram od roku 1961 na Wyżynie Łódzkiej, napotkałam trzy nowe gatunki: *Acaricalus juniperi* sp. n. i *Aculus granulatus* sp. n. z rodziny *Eriophyidae* oraz *Diptacus sulcatus* sp. n. z rodziny *Rhyncaphytoptidae*.

Wymienione rodzaje są reprezentowane na terenie Polski przez 23 gatunki (BOCZEK, 1961, 1961, 1964, 1964, BOCZEK, KROPCZYŃSKA 1965; SZULC, 1963). BOCZEK stwierdził w Polsce występowanie *Acaricalus halli* BOCZEK, *Diptacus giganthorhynchus* (NAL.) i *D. sacramentae* (KEIFER) oraz 20 gatunków z rodzaju *Aculus* KEIFER.

Preparaty opisanych w pracy gatunków szpecieli oraz zasuszone rośliny przechowywane są w zbiorach Katedry Zoologii Systematycznej Uniwersytetu Łódzkiego.

РЕЗЮМЕ

Среди материалов, касающихся *Eriophyidae*, собираемых мною с 1961 года на Лодзинской возвышенности, оказались три новых вида: *Acaricalus juniperi* sp. n. и *Aculus granulatus* sp. n. из семейства *Eriophyidae*, а также *Diptacus sulcatus* sp. n. из семейства *Rhyncaphytoptidae*.

Названные роды представлены на территории Польши 23 видами (BOCZEK, 1961, 1961, 1964, 1964, BOCZEK, KROPCZYŃSKA 1965; SZULC, 1963). Бочек установил наличие в Польше *Acaricalus halli* BOCZEK, *Diptacus giganthorhynchus* (NAL.) и *D. sacramentae* (KEIFER) а также 20 видов из рода *Aculus* KEIFER.

Препараты описанных в работе видов *Eriophyidae* и образцы растений хранятся в собраниях Кафедры систематической зоологии Лодзинского университета.

Redaktor zeszytu: prof. dr K. Kowalski

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